Fertilizer Recommendation System for Disease Prediction

Team Id: PNT2022TMID47880

Date: 10 NOV 2022

Objective:

Agriculture is an essential need for human life AI and machine learning serves the better platform for smart agriculture. Since India is land of versatile soils, Indian economy is mainly based on agriculture whereas agricultural productivity depends upon the type of soil. But major problem with Indian farmers is insufficient knowledge about soil. Each soil type has different characteristics i.e., there are various nutrients present in the soil. Deficiency of the nutrients in soil decreases the crop productivity. So, there is a need for soil analysis. In Automated farming, we intend to reduce human efforts by monitoring the soil quality using soil sensor via smartphones and webserver. The key feature of our system is to determine suitable crops and fertilizers for current state of soil. By calculating the pH and moisture content in soil. Our system will be used for soil analysis in order to increase crop yield. Based on soil analysis report, fertilizers will be recommended to the user. Agriculture is the main aspect for the economic development of a country. Agriculture is the heart and life of most Indians. But in recent days, the field was going down due to various natural calamities. In order to overcome the problem, various issues in this field need to be addressed. The soil type, fertilizer recommendation, diseases in plants and leaves. All these features need to be considered. Our proposed system was organized in such a way, to analyze the soil type, diseases in the leaves and finally to recommend the appropriate fertilizer to the farmers, that may be of great help to them. Plant disease, especially on leaves, is one of the major factors that reduce the yield in both quality and quantity of the food crops. Finding the leaf disease is an important role to preserve agriculture. Smart analysis and Comprehensive prediction model in agriculture helps the farmer to yield right crop at the right time.